

REMARKS

Applicants have considered the outstanding official action. It is respectfully submitted that all the claims of the application are directed to patentable subject matter as set forth below.

The outstanding rejections are as follows:

- (1) Claims 3, 6-8, 11, 21-22 and 24-27 under 35 U.S.C. §103(a) over U.S. Patent No. 3,791,602 (Isakson);
- (2) Claims 4-5, 9-10, 23 and 37-38 under 35 U.S.C. §103(a) over Isakson as applied to claims 3, 6-8, 11, 21-22 and 24-27 above, and further in view of U.S. Patent No. 5,603,467 (Perini); and
- (3) Claim 28 under 35 U.S.C. §103(a) over Isakson as applied to claims 3, 6-8, 11, 21-22 and 24-27 above, and further in view of U.S. Patent No. 4,422,588 (Norwisch).

Claims 3 and 21, the only previously pending independent claims, are rejected under §103(a) as being unpatentable over Isakson based on a combination of two different embodiments of Isakson. Applicants submit that the structures of the rewinding machines and method of producing logs as claimed in the captioned application are

substantially different from the structure of the rewinder and method as described in Isakson.

Isakson discloses a rewinder wherein cores are supported by a mandrel and placed in contact with pulley belts 22 (entrained around roll 24 on shaft 26). Each core 20 is fed into the machine by bringing the core into contact with the belts 22 but not with the roller 12. During winding, the core is advanced along the belts 22 such that the log being formed is never in contact with roller 12 and, in fact, moves farther away from roller 12 as a log is formed. Thus, roller 12 is not a "winding roller" or a "winding element". Additionally, as shown in FIGURES 13-15, glue is applied on the web guided around the roller 12 and the glued web is transferred to the formed roll 40. The cores are not fed around the roller 12 between the roller and the glue applicator 48A nor are the cores fed between blade 46 and the roller 12.

Applicants claimed structure and method include a web material fed around a first winding roller. The first winding roller forms a nip with a second winding roller. The cores and the web material are fed along web and core advancement paths through the nip. A web severing device, as well as the gluing device, act on the web material fed

around the first winding roller. In a preferred embodiment, a rolling surface extends around the first winding roller and the core and web material advance along the advancement paths. The web severing and gluing devices act on the web material along a channel formed between the first winding roller and the rolling surface.

Claims 3 and 21 have been amended to clarify the rewinder structure and method claimed which in turn clarifies the distinction between the claimed device and method from the devices and method described in Isakson.

More specifically, the amended claims define the core advancement path and defines a nip formed between first and second winding rollers wherein the web and core advancement paths extend through the nip. The "winding" function of the first winding roller is further emphasized in that the logs are formed in contact with the first and second winding rollers. The amended claims further require that the core is caused to pinch or pinches the web material against the first winding roller.

The claimed structure and method are substantially different from the machine and method disclosed in Isakson to an extent that applicants submit Isakson is no longer a pertinent primary reference. Applicants submit with respect

to amended claims 3 and 21, that Isakson (FIGURES 13-15) fails to disclose (a) a web severing means acting on a winding roller; (b) a nip having first and second winding rollers; (c) a nip between first and second winding rollers through which the web material and cores advance (noting as set forth above that roller 12 of Isakson is not a winding roller); (d) the core advancement path, the first winding roller and the web material advancement path being arranged such that the cores are caused to pinch or pinch the web material against the first winding roller; and (e) logs are wound in contact with the first and second winding rollers.

It is noted that while feature (a) above itself is disclosed by Isakson in the embodiment of FIGURES 6-8, even by combining the two separate embodiments of Isakson, no suggestion is provided to modify such so that one skilled in the art would obtain applicants' claimed combination since at least features (b)-(e) are not provided by such combination. While these missing features (b)-(e) may be described in a secondary reference, i.e., Perini, the two references cannot be combined in an obvious manner to provide applicants' claimed structure and method as in amended claims 3 and 21.

More specifically, applying Isakson as the primary reference, even assuming for purposes of argument that one skilled in the art would consider using roller 12 as an anvil roller for web cutting and gluing, one skilled in the art would not have considered using such roller to wind the web, i.e., to have the log being formed be in contact with first and second winding rollers. This is inconsistent with the teaching of Isakson wherein winding is started near, but not in contact with, the roller 12 and then upon continued winding, the log 40 is distanced from the position where the winding starts, see FIGURES 8 and 15. Isakson discloses using roller 12 as an anvil roller for cutting the web (FIGURES 6-8) or as an anvil roller to glue the web (FIGURES 13-15). Thus, it would not have been obvious to use the same roller to cut the web, glue the web and wind the web, as claimed by applicants.

Alternatively, starting with Perini as the primary reference, Perini fails to disclose the following features of the amended claims:

(a) at least one glue dispenser including a mechanical member that touches the web material at end of winding of each log to apply glue to a portion of the web material, in proximity to a severing line, along which the web material

is severed upon termination of winding each log to form a final free edge and an initial free edge, with the glue gluing the final free edge of the log;

(b) the mechanical member of the glue dispenser as integral with the severing element or as part of the severing element, and

(c) the mechanical member, the web advancement path and the first winding roller being constructed and arranged such that the web material is fed between the mechanical member and the first winding roller when the mechanical member applies glue to a portion of the web material contacting the first winding roller.

No teaching or suggestion is present in the applied art which provides applicants' claimed combination of features, neither the combination of Perini and Isakson as to the embodiment of FIGURES 6-8 nor the embodiment of FIGURES 13-15, in particular, since Perini and Isakson are based on entirely different winding systems, i.e., in Perini the core is in contact with and rotated by the winding rollers and in Isakson the core is supported by a mandrel and moved while in contact with a pulley belt. One skilled in the art knows that these are different winding concepts and would not have combined them together.

Moreover, Isakson discloses applying glue on the tail edge of the web, such as to glue log 40, upon completion of the winding thereof. However, in order to apply the glue, a large and cumbersome device 48A, 50A, 52, 54, 56, 58 is required, which could not have been arranged around a surface rewinding cradle as disclosed in Perini and claimed by applicants. It would not be possible to arrange a gluing device as disclosed by Isakson in a rewinder as disclosed in Perini, wherein the core pinches the web against the first winding roller, as now required by applicants' amended claims.

New claim 41 includes the following features: (a) a core advancement path, along which cores are fed; (b) a surface defining with a first winding element a channel to feed the winding cores; (c) a core advancement path extending along the channel; (d) the first winding element and the surface being constructed and arranged such that the cores advance along the channel by rolling on the surface and in contact with the web material fed around the first winding element; and (e) a mechanical member applying glue on the web material along the channel.

Features (a)-(d) of new claim 41 are not disclosed in Isakson and combining Perini and the two different

embodiments of Perini together to provide applicants' claimed combinations is not obvious for the reasons set forth above with respect to amended claims 3 and 21. Additionally, even if Perini were combined with the embodiments of Isakson in FIGURES 6-8 and FIGURES 13-15, the combination of new claim 41 would not be obtained, since neither Perini nor Isakson disclose feature (e) above. No teaching or suggestion is provided by the applied art as to motivate one skilled in the art to include feature (e) in a machine according to Perini based on Isakson or, alternatively, in a machine according to Isakson and modified according to Perini. Indeed, Isakson teaches the application of glue on a web material while the web material is fed around roller 12 in a position distant from the core insertion area between core 12 and belts 22. There is no space in Isakson to arrange a gluing device along the core advancement path. If one considers combining Isakson and Perini (which would not be obvious per se), one based on such teachings would arrange the glue applicator outside the core advancement path, i.e., outside the channel 130 (FIGURE 3) of Perini. Thus, feature (e) in a combination as claimed is not obvious based on the teachings of the applied art.

New claim 43 includes the following combination of features: (a) a core advancement path along which winding cores are sequentially fed, the web material being wound around the winding cores; (b) a first winding roller and a second winding roller which define a nip therebetween, (c) the core advancement path and the web advancement path extend through the nip, (d) the web material being guided and fed around the first winding roller; and (e) logs formed by winding the web material around the cores keeping the logs being formed in contact with the first and second winding rollers.

Features (b)-(c)-(e) of new claim 43 are not taught in Isakson. The combination of Perini and Isakson is not obvious as set forth above and, even if combined, does not provide the claimed combination of features. Notably, there is no reason why, starting from Perini, one skilled in the art would have considered applying glue on a tail edge of a roll by providing a gluing element integral with the web severing element. This is not disclosed by Isakson and in order to make the severing element and the gluing element integral or part of one another, one skilled in the art would have had at least to combine different embodiments of

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Isakson in the absence of any reason to provide this combination.

The secondary reference of Norwisch is applied only with respect to additional limitations in certain dependent claims. Accordingly, applicants submit that Norwisch does not make up for the shortcomings of the primary reference of Isakson.

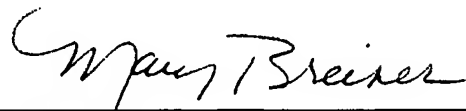
Applicants respectfully submit that the pending claims are not rendered obvious within the meaning of 35 U.S.C. §103 over Isakson alone or in combination with either Perini or Norwisch. Withdrawal of the 35 U.S.C. §103 rejections are, therefore, respectfully requested.

Reconsideration and allowance of the application is respectfully urged.

Respectfully submitted,

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